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South Dakota State Department of Agriculture and State College  
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ORGANIZATION OF FARMS IN WESTERN SOUTH DAKOTA AND PROGRESS  
OF FARMERS WHO HAVE SETTLED IN THE AREA.

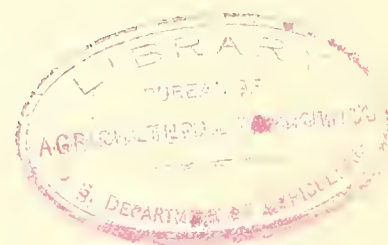
A Preliminary Report

based on

Farm business reports from 64 farmers in  
Haskon, Perkins, Stanley and Dewey Counties,  
for the farm year 1922-1923, and progress,  
reports from these farmers, from the  
time of their settlement in the  
area.

Washington, D. C.

Aug. 1924.



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ORGANIZATION OF FARMS IN WESTERN SOUTH DAKOTA AND  
PROGRESS OF FARMERS WHO HAVE SETTLED  
IN THE AREA.

By

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The slow financial advancement of many ranchers and farmers in western South Dakota has been due in large part to the strained economic conditions during the past 5 years, but other factors for a much longer period have had a more or less important part in the financial progress of those who have settled in this area. Ranchers, who failed to provide forage in dry years by a liberal carry over of surplus feed from years of heavy production, or who neglected to allow for the occasional long hard winter in which stock could not rustle their own feed have occasionally suffered large losses. Animal diseases and crop pests have taken their toll. In some areas the progress of ranchers as well as farmers has been retarded by the lack of adequate transportation facilities.

Throughout the region there has been a keen desire on the part of many farmers and ranchers, for guidance and information concerning the fundamental principles involved in the readjustment of enterprises to meet changing economic conditions. In 1923, the Bureau of Agricultural Economics of the U. S. Department of Agriculture, in cooperation with several states in the Great Plains region, conducted a research program in this region to determine the financial situation confronting the farmers, and to determine the system of farming and the methods and practices in livestock and crop production best suited to the different parts of the region. The material obtained is now being prepared for publication in bulletin form by the Bureau of Agricultural Economics.

This report contains information of prime importance to a thorough understanding of the region and shows some of the conditions which have influenced the financial progress of farmers in western South Dakota. The general information was obtained from personal interviews with farmers, ranchers, merchants and bankers. The details of the farm business and financial condition of the farmers are based upon individual reports obtained from 64 farmers and ranchers for the year beginning March 1, 1922 and ending February 29, 1923.

### Description of Area

A large part of the Great Plains region in South Dakota west of the Missouri River is still in the pioneer stage of development, is thinly settled, and handicapped by the need for rail transportation. The extensive areas of excellent pasture make the production of feeder cattle and sheep two of the most important enterprises. In a few sections some feeding is being done. Hogs are an important enterprise on farms where corn is produced in sufficient quantities. Corn can be grown satisfactorily throughout western South Dakota if the right cultural methods are employed.

The land is generally rolling, with "breaks" along the streams and occasional "buttes" upon the uplands.

The soils, over the larger part of this area, vary from a sandy or clay loam to a very heavy clay or "gumbo". The Pierre clay or "gumbo" soil constitutes about one-third of western South Dakota. It is on this type of soil that dry farming is most difficult and crop production is least successful. The lighter soils do not produce as high yields as the heavier soils in favorable years, but they will endure more drought and produce better yields in years of light rainfall.

The climate is semi-arid and is the most important factor in crop production. About 65 per cent of the rainfall, which on the average varies from 13 to 18 inches per year, occurs during the five months from April to August. Nearly every year the growth of some crop is retarded to some extent by drought but not since 1911 has there been a complete failure of all crops.

### Organization of Developed Farms

Livestock production supplemented by the growing of more or less corn, alfalfa and small grains is the form of organization most common to farms in western South Dakota. Considerable variation exists in the method of caring for stock during the winter. Some farmers provide for very little winter feed, depending upon the stock to rustle their own feed on the range during practically the entire winter. Others are careful to provide a surplus of winter feed and do considerable winter feeding. Crop production thrives to some extent in parts of all the counties visited, but experience with crop failures in dry years and, in many cases, the long distance to market have left but few farmers who are willing to depend entirely upon grains for their incomes. The production of alfalfa seed has been a particularly profitable enterprise, and in some cases flax has been profitable. Where conditions are favorable, the production of both of these crops is recommended.

The 64 farms studied were divided into 4 groups in order that the various forms of farm organization observed, in the course of this survey, might be analyzed more closely. The groups, shown in Table I, represent the relative importance of livestock and crops on these farms. Farms of cattle ranchers, who do a comparatively small amount of farming are classified under "cattle", farms of farmers who devote most of their effort to crop production are entered under "crop". Since most of the "8 crop farms" in this study are located in an old lake basin in Dewey County, they are not considered as typical of conditions found in the Great Plains region of western South Dakota. There are, however, many sections and communities in which farming is almost as well developed as this in Dewey County. The other farms studied are scattered throughout Haakon, Perkins and Stanley Counties.

Table I - Distribution of Farm Area, Capital and Regular Labor on Farms

	Type of Farm					
	Cattle	Sheep	Livestock and crop	Crop	All	
Number of farms	16	88	32	8	64	
Acres in crop	69	75	125	247	120	
Acres in wild hay	284	118	146	72	168	
Acres in pasture	2333	2020	838	487	1516	
Total	2686	2213	1109	806	1604	
Distribution of farm capitalization per farm						
Real Estate	19803	16192	13448	11350	15117	
Livestock	10348	10159	4734	2774	6570	
Machinery and equipment	738	931	730	1277	831	
Automobile and truck <sup>I/</sup>	163	217	136	179	159	
Feed & supplies	278	215	423	498	370	
Cash to run farm	647	562	329	162	417	
Total	31977	28276	19810	16240	23464	
Distribution of regular labor per farm						
Operator and family (months)	17	15	17	14	16	
Regular hired (months)	1	8	1	2	1	

<sup>I/</sup> Automobiles were owned by 14 cattlemen, 6 sheepmen, 20 livestock-and-crop men and 7 crop men.

The cattle farms in general and the sheep farms in particular are located farthest from the towns and railroads where grazing lands are abundant and cheap. This is partly brought out by the fact that the real estate value per acre on the sheep and cattle ranches averaged approximately \$7.40 per acre, while on the livestock-crop farms and crop farms it amounted to \$12.00 and \$14.00 respectively. The value of the land per acre includes rough land in the "breaks", open prairie pasture, and land under cultivation.

Although the number of farms in each group is small, the organization of these farms is typical of the kinds of farming followed. The average size of business for each type of farm, is larger perhaps than most farms in the area.

The number of farms of different sizes are shown in Table 2.

Table 2-Number of Farms of Different Sizes and Average Number of Acres Operated, Owned and Rented.

Size of farms (acres)	Number of farms	Type of Farm Cattle Sheep Livestock and Crop	Crop	Acres Operat- ed Owned Rented			
319 and less	4	1	1	1	160	160	-
320 - 959	20	-	1	15	651	521	130
960 - 1599	15	2	1	9	1196	578	518
1600 * 2239	13	5	2	6	1935	769	1166
2240 & over	12	8	3	1	3824	1852	1972
All	64	16	8	32	1604	835	769

#### Crop Production

The production of small grains in most parts of western South Dakota, as previously stated, has not as yet been successful enough to depend upon alone for farm profits. According to Farmers' Bulletin 1163 "Dry Farming in Western South Dakota" the average crop yields over a period of years show yields that should be profitable. But these fairly good average yields, as the bulletin points out, are due to high yields in good years and low yields in poor years rather than to fairly good yields each year. For this reason, a stable agriculture based upon grain production alone has not been established.

Table 3 shows the 11-year average yields (1909-1919) obtained on the dry-farming unit of the Belle Fouche Experiment Farm near Newell, and the 8-year average yield (1912-1919) obtained at the Ardmore Field Station. Both of these stations are in Western South Dakota. The report (Farmers' Bulletin 1163) states that while these yields are probably above the averages obtained by all farmers, it ought to be possible for farmers using only the best methods to equal or exceed them. On the average, 1922 was a good crop year in western South Dakota, as shown by the average yields obtained on the farms visited.

Table 3-Crop Yields on Belle Fouche and Ardmore Field Station Farms and on Farms Studied.

Crop	Average Yields I/				Yield in 1922 on farms studied
	Belle Fouche	:	Ardmore	:	
	bushels	:	bushels	:	bushels
Wheat	13.4	:	16.7	:	14.8
Oats	29.8	:	31.1	:	37.5
Barley	18.0	:	17.2	:	23.9
Corn grain	16.2	:	16.0	:	23.7
Rye	Yields not given				12.3
Flax	"	"	"	"	8.3
Alfalfa	"	"	"	"	1.5 tons

I/ Belle Fouche - 1909-1919  
Ardmore 1912-1919

No yields were obtained at the Belle Fouche Field Station in 1911 on account of drought. The average yield is for the 11 year period.

Much of the hay grown, especially on the sheep and cattle ranches, is made from the native grasses which are of excellent quality and which yield from one-half to one ton per acre.

Corn is becoming an important crop in most parts of western South Dakota. Even in the driest years, corn produces fair yields of fodder, and in most years fairly good yields of grain. Seeding wheat on corn stubble land nearly always insures a crop as the stubble holds the snow and leaves the seed bed in a moist and favorable condition for spring seeding.

Alfalfa and corn are the principal crops on all but the crop farms as will be seen from Table 4.

Table 4-Percentage Distribution of Crop Acreage on Farms of Different Types.

Crop	Type of Farm					Crop	All
	Cattle	Sheep	Livestock and		Crop		
	Percent	Percent	Percent	Percent	Percent		Percent
Wheat	2	8	7	34	13		
Alfalfa	58	31	36	5	31		
Corn (all)	25	18	32	17	26		
Barley	3	5	4	2	3		
Oats	1	14	12	17	12		
All other	11	26	9	25	15		
All crops	100	100	100	100	100		

It would appear from Table 5 that many of the cattle and sheep men can seriously consider the desirability of growing some fodder or of increasing their present acreage and thus prevent the possibility of large losses due to long, severe winters following a scant native hay crop.

Table 5-Number of Farms Growing Specified Crops and Total Crop Acreage on Farms

	Type of Farm									
	Cattle	Sheep	Livestock and		Crop	All				
	No	Total	No	Total	No	Total	No	Total	No	Total
Crops Grown	farms	acre	farms	acre	farms	acre	farms	acre	farms	acre
	growing	age	growing	age	growing	age	growing	age	growing	age
Wheat	2	22	2	48	13	286	6	675	23	1031
Oats	2	17	2	85	20	484	7	335	31	921
Rye	-	-	-	-	4	87	4	269	8	356
Corn for grain	8	209	1	20	29	1099	8	180	46	1508
Other corn	3	67	7	89	6	139	5	157	21	502
Alfalfa	11	640	4	186	25	1452	5	108	45	2386
Sweet clover	-	-	1	56	-	-	4	98	5	154
Flax	-	-	-	-	1	6	2	62	3	68
Barley	1	30	1	15	8	144	1	32	11	221
Millet hay	1	4	2	75	6	36	1	2	10	117
Cane	4	60	-	-	6	108	-	-	10	168
Other	2	60	2	26	13	109	5	62	22	257
Total crop acreage:		1109		600		4000		1980		7689
Average number of :										
crop acres per farm	69		75		125		247		120	

# Livestock Production

The distribution of livestock on the farms visited is shown in Table 6. Most of the crop farms keep enough cattle and hogs to utilize their unmarketable crops and thus make more certain their incomes from farming. This is a good practice for all farms where a considerable acreage of grain is produced. Marketing grain, especially corn, through livestock is perhaps the best means of disposing of crops when the distance to market is great and the value of the products is comparatively low. Most of the successful livestock men in western South Dakota are now feeding all of the corn and most of the grain they produce. They are also providing a surplus of grain and feed against a dry summer or a hard winter.

Table 6-Average Number of Livestock per Farm and Value per Head

	Type of Farm									
	Livestock:									
	Cattle	Sheep	and	Crop	All					
				Crop						
Number of farms	16	8	32	8	64					
	No.:	Value:	No.:	Value:	No.:	Value:	No.:	Value:	No.:	Value:
Kind of	per	per	per	per	per	per	per	per	per	per
Livestock	farm:	head	farm:	head	farm:	head	farm:	head	farm:	head
Cattle 2 years and over	151:	\$49	13:	\$43:	56:	\$45:	19:	\$50:	70:	\$47
Cattle under 2 years	44:	34	15:	28:	27:	31:	19:	27:	29:	31
Horses, work	11:	51	7:	47:	7:	50:	8:	63:	8:	52
Horses, unbroken	32:	32	13:	27:	26:	26:	7:	57:	24:	29
Sheep, breeding, ewes	-	-	799:	8.24:	-	-	-	-	100:	8.24
Sheep, other	-	-	213:	10.87:	-	-	-	-	27:	10.87
Hog, brood sows	4:	19.56:	2:	19.17:	7:	24.83:	10:	25.0:	6:	23.49
Hogs, other	14:	5.68:	8:	7.38:	22:	7.63:	12:	9.52:	16:	7.21
Poultry	42:	.68:	41:	.72:	63:	.68:	100:	.87:	59:	.72

## Farm Returns in 1922

For the 64 farms, the average farm income, which is the difference between farm receipts and farm expenses, compares favorably with the averages reported in similar surveys in the Great Plains of Colorado, Kansas and Montana, covering the same period. This does not mean, however, that farming was generally profitable on the farms included in the South Dakota study. For all farms, a return of but \$1657 was received for the use of \$23,464 of capital, and the labor of the farmer and his family for the year as shown in Table 7. In addition, these farms furnished food, fuel, and house to live in together estimated to be worth an average of \$474. The importance of the various items of food furnished by the farm is shown in Table 8.

Table 7-Average Income from Farming, Mar. 1, 1922-Mar.1, 1923.

	Type of Farm				
	Livestock:				
	Cattle	Sheep	and Crop	Crop	All
Number of farms	16	8	32	8	64
Cash receipts per farm	Dollars	Dollars	Dollars	Dollars	Dollars
Total crops	87	115	206	1073	273
Total livestock	4337	4268	1827	661	2613
Cattle	4208	44	1498	260	1839
Hogs	109	26	255	343	201
Sheep	-	4130	-	-	516
Other	16	68	74	58	57
Total livestock products	127	2809	288	505	590
Wool	-	2720	-	-	340
Other	127	89	288	505	250
Other cash receipts	67	58	94	69	80
Total cash receipts	4614	7248	2415	2308	3556

Cash Expense per Farm					
Hired labor	285	1265	175	244	348
Livestock bought	447	257	98	6	193
Feed bought	84	272	47	49	84
Seed bought	12	14	19	24	17
Automobiles for farm use	77	109	80	72	82
Tractor	20	9	23	28	21
Repairs to machinery and bldgs.	46	51	28	43	38
Threshing	3	35	41	200	51
Grain insurance	3	10	19	77	21
Taxes	472	450	267	210	334
Cash rent	222	168	95	45	129
Miscellaneous expenses	70	247	81	78	99
Total Cash Expenses	1741	2887	973	1076	1417

Income					
Cash receipts less cash expense	2873	4361	1442	1232	2139
Net inventory change I/	-977	-1590	-128	-2	-482
Family farm income	1896	2971	1314	1230	1657
Value of family labor	132	84	174	128	159
FARM INCOME	1714	2887	1140	1102	1498
Value of operator's labor	\$ 647	\$ 675	\$ 598	\$ 588	\$ 618
Return on investment	3.3%	7.8%	2.8%	3.1%	3.7%
Value of family living furnished by farm	\$ 499	\$ 530	\$ 474	\$ 410	\$ 474

I/ Decrease in inventory value of feed and supplies, livestock, buildings and machinery.

Table 8-Value of Commodities Produced at home and the Number of Families Using Different Amounts of Each.

	Kind of products		
	Butter, milk and eggs	Meat	Garden
None reported used	1	1	3
\$ 1 - 50 worth	-	5	19
51 - 100 "	13	28	33
101 - 150 "	18	20	7
151 - 200 "	19	7	1
over - 200 "	13	3	1

The sheepmen on the average made the highest return on their investment due largely to the comparatively high price of sheep and wool.

Hired labor and taxes were the largest single items of each expense on the farm. On the sheep farms, where considerable help is needed in tending the flocks and during the lambing and shearing seasons, the labor expense is necessarily high.

Variations in farm income are shown in Table 9. On five of the 64 farms the expenses amounted to more than the receipts and on two farms (one cattle and one sheep) the receipts exceeded the expenses by more than \$5,000.

Table 9-Number of Farms Having Specified Farm Incomes.

Farm Income	Type of farm				All Farms
	Cattle	Sheep	Livestock and Crop	Crop	
Expenses greater than receipts	1	1	3	-	5
\$ 0 - 999	6	0	11	5	22
1000 - 1999	4	2	16	2	24
2000 - 2999	2	1	1	1	5
3000 - 3999	1	2	-	-	3
4000 - 4999	1	1	1	-	3
5000 & over	1	1	-	-	2

# Progress of Farmers From Time of Their Settlement.

The results brought out in a single year's study of the farming reflect but a small part of the conditions which have surrounded farmers from the time of their settlement, in an area, and which have determined their present financial status. A few of the conditions which have influenced the financial progress of the 64 farmers, included in this study, together with statements concerning their present indebtedness and net worth, will be briefly discussed.

## Acquisition and Time of Settlement.

Methods by which 64 farmers acquired their land and the years of their settlement in the area are shown in Table 10. The first cost and the size of the farms on which they settled, the extent of improvements when purchased, and the value and size of their farms at present are also given.

Table 10-Change in Property Values from Time of Settlement to March 1, 1923, according to Method of Acquisition.

	Time of Settlement									
	1904 & earlier	1905-1908	1909-1912	1913 & later	All					
	Home-stepped	Purchased	Home-stepped	Purchased	Home-stepped	Purchased	Home-stepped	Purchased	Home-stepped	Purchased
Number of farmers	8	3	24	2	15	1	1	10	48	16
Average acres per farm	160	160	195	240	181	160	300	240	187	220
Average cost of land	\$ 45	\$ 967	\$ 77	\$ 2460	\$ 63	\$ 720	\$ 70	\$ 3616	\$ 67	\$ 2794
Average value of Imp.	None	None	\$ 14	\$ 200	None	None	\$ 30	\$ 1323	\$ 8	\$ 852
Average Cost of Land and Improvements	\$ .45	\$ 967	\$ 91	\$ 2660	\$ 63	\$ 720	\$ 100	\$ 4939	\$ 75	\$ 3646
Average Cost of land and Improvements	\$ .28	\$ 6.04	\$ .47	\$ 1.08	\$ .35	\$ 4.50	\$ .37	\$ 20.58	\$ .40	\$ 16.57
Average acres per farm 3/1/1923	1315		928		649		424		3838	
Average value of Imp. 3/1/1923	\$ 4092		\$ 2731		\$ 1803		\$ 2304		\$ 2660	
Average value of land and Improvements 3/1/1923	\$ 23942		\$ 17136		\$ 9379		\$ 9869		\$ 15117	
Average value of land and Imp. per acre 3/1/1923	\$ 18.19		\$ 18.47		\$ 14.45		\$ 23.25		\$ 18.04	

The present types of farming followed by the farmers who came to the area during the different periods are as follows:

Of the 11 men who came to the area before 1905, 4 are at present engaged primarily in cattle production, 2 in sheep and 5 in livestock and crop production.

Of the 26 men who settled in the period from 1905 to 1908, 8 are cattlemen, 3 sheepmen, and the remainder are engaged in livestock and crop production.

All of the crop farmers came to the area since 1908 while all of the sheepmen, all but 3 of the cattlemen and all but 4 of the livestock-crop men settled before 1913.

Those who settled during the earlier periods have, on the average, the larger farms and larger real estate investment chiefly because type of farming which they follow has made it desirable for them to extend their real estate holdings whenever possible in order to insure grazing lands for their stock.

The method of obtaining additional land and the amount and cost are shown in Table 11. Those who purchased additional land prior to 1905 paid on the average, \$4.85 per acre, those who purchased since 1913, paid \$9.63. Most of the homesteads and purchases took place after 1913, due largely to additional homestead rights and to high prices for farm products during the war.

Table 11-Method of Obtaining Additional Land, the Amount and Cost.

	Year of Acquiring Additional Land									
	1904 and earlier		1905-1908		1909-1912		1913 and later		All	
	Home-	Pur-	Home-	Pur-	Home-	Pur-	Home-	Pur-	Home-	Pur-
	stead:	chase:	stead:	chase:	stead:	chase:	stead:	chase:	stead:	chase:
Number of farmers	1	3	-	4	4	11	27	45	32	63
Average acres of addtl. land	160	267	-	700	160	422	269	565	252	535
Average Cost	\$ 32	\$1293	-	\$4498	\$ 61	\$3318	\$ 52	\$5444	\$ 53	\$4825
Average cost per acre	\$ .20	\$4.85	-	\$6.42	\$ .38	\$7.87	\$ .19	\$9.63	\$ .21	\$9.00

The number of men visited who had increased their holdings by purchase, homestead or both since coming to western South Dakota, is as follows:

10 men had no increase in acreage since their original purchase or homestead.

22 men increased their holdings by purchase only

6 men increased their holdings by homestead only

26 men increased their holdings by homestead and purchase.

### Indebtedness

All but 10 of the farmers visited had first mortgages and one-half had chattel liabilities (Table 12). The high interest rate on chattel mortgages - usually 10 per cent - together with deflated livestock values, has made the possibility of liquidating debts extremely difficult for many of the livestock men in this area who obtained large loans on inflated livestock values.

Table 12-Number of Farmers and Average Amounts of Their Mortgages and other Debts.

Form of Liabilities	March 1, 1922		March 1, 1923	
	Number of farmers	Average Amount	Number of farmers	Average Amount
First mortgages	54	\$3402	54	\$3356
Second mortgages	8	4048	8	4018
Chattel mortgages	32	5103	32	4619
Other debts	4	1875	8	1430
Back taxes	7	339	7	424

Fifty-four first mortgages were on the 64 farms. Of these  
 13 were held by private individuals, banks or cooperations  
 32 were State Farm loans ranging from \$550 to \$7500 and  
 9 were Federal Farm loans ranging from \$665 to \$9800.

Whenever possible, farmers who are carrying high interest-bearing first mortgages should endeavor to replace such mortgages by Federal or State loans.

Of the 59 farmers with real estate mortgages on their farms amounting to less than half the estimated value of the real estate capital.

9 had no real estate mortgages and only one of these had a chattel mortgage. It amounted to \$8000 on an estimated chattel valuation I/ of \$16,921.

28 had real estate mortgages ranging in amount from 1 to 24 per cent of the real estate capital. All but 5 of these were carrying chattel mortgages amounting to an average of \$2,195 on a chattel capital of \$5,888 for the farms with chattel mortgages.

22 had real estate mortgages ranging in amount from 25 to 49 per cent of the real estate capital. Ten of these had chattel mortgages amounting to an average of \$6,755 on an average chattel capital of \$10,686.

Of the 5 farmers with real estate mortgages on their farms amounting to more than half of the estimated value of the real estate capital;

4 had real estate mortgages ranging in amount from 50 to 74 per cent of their real estate capital. These farmers are in a bad way financially, when their real estate equity alone is considered. But, fortunately, only one of them has a chattel mortgage and the value of the chattel capital on this farm amounted to \$6,959 more than the chattel mortgage. On the three farms in this group with no chattel mortgages, the chattel capital amounted to an average of \$8,170 per farm.

A further study of chattel mortgages on these farms showed that the 8 men in the group with the highest percentage of their chattel capital covered by chattel mortgages, on the average, had chattel mortgages in excess of the estimated value of their chattel capital. The reason is that most of the loans were obtained on inflated cattle values several years ago. The accumulation of unpaid interest on such debts, combined with the drop in livestock values, had not only been the principal financial difficulty for most livestock men in Western South Dakota, but it also has been a serious strain on the solvency of banks that specialize in livestock loans.

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I/

The term "chattel capital" as used in these tables includes the estimated value of the livestock, automobile, tractor, and separator.

When comparing the total liabilities of the farmers with their total assets, it is found that all but 7 of the farmers were in debt to the extent of less than half the value of their total assets. (See Table 13). Seven of the farmers were clear of all debts. Practically all of those who were most in debt had borrowed large amounts of capital on inflated livestock values for the purpose of increasing their present business by buying more livestock or land or had borrowed to buy feed for stock during severe winters. Since taking out the large loans, most of these farmers have not been able to meet their interest payments and other debts as they came due.

All of the farmers visited showed total assets in excess of total liabilities.

Table 13-Relation Between Total Liabilities and Total Assets of 64 Farmers on March 1, 1923.

Total liabilities compared with total assets	Number of farmers	Average amount of liabilities	Average value of total assets	Average net worth
		dollars	dollars	dollars
Farmers with no liabilities	7		29414	29414
1 to 24 per cent	27	3140	23311	20171
25 to 49	23	7634	22441	14807
50 to 74	5	17122	28335	11213
75% and over	2	14800	17808	3008
<b>A I 1</b>	<b>64</b>	<b>5868</b>	<b>23886</b>	<b>18018</b>

Note:

"Total farm liabilities" as used in the report, includes all debts against the farmer and "total farm assets" takes in the value of all his real estate, livestock, equipment, feed, supplies, crops and cash on hand, household goods, and debts due him on March 1.

#### Net Worth I/

The financial progress, or change in net worth, of farmers, brought about by farming activities and the change in the value of the land since occupation is shown in Table 14. Any increase in net worth due to outside investments and earnings of these men is not included in these figures.

I/ "Net Worth" of a farmer, as used here, means the difference between his total assets and total liabilities as of the farm.

Table 14-Change in Net Worth of Farmers Due to Farming Activity and Change in Value of Land.

	: 1904 :	1905 :	1909 :	1913 :	
	:and earlier:	1908 :	1912 :	: and later :	A l l
Number of farmers	: 11 :	26 :	16 :	11 :	64
Average change due to farming activities	: 15010 :	8835 :	5904 :	1414 :	7888
Average change due to change in land value	: 11393 :	7882 :	5633 :	2032 :	6918
Average change due to farming activities and change in land value	: 26403 :	16717 :	11537 :	3447 :	14806

Since coming to Western South Dakota the change in net worth for different numbers of farmers as shown in Table 14 is as follows:

2	men	had	a	decrease	in	net	worth	of	over	\$4,000
8	"	"	"	an	increase	"	"	"	"	less than \$4,000
11	"	"	"	"	"	"	"	"	"	\$4,000 to \$7,999
12	"	"	"	"	"	"	"	"	"	\$8,000 to \$11,999
15	"	"	"	"	"	"	"	"	"	\$12,000 to \$19,999
9	"	"	"	"	"	"	"	"	"	\$20,000 to \$31,999
7	"	"	"	"	"	"	"	"	"	\$32,000 and over.

All but ten of the interviewed farmers had improved their financial conditions since coming to this area. On the average, this accumulation of wealth, due to farming activities and changes in land values, is closely associated with the time of settlement. Elapsed time, and experience of settlers are important but are not the only factors.

#### Recommendations

Some of the more important opportunities, suggested by this survey, for securing the largest net returns and reducing hazards from ranching and farming in Western South Dakota are briefly discussed.

A careful combination of livestock and crop production is the best basis for a permanent agriculture in this area. The most desirable combination for each farmer to follow will depend largely upon such factors as amount and quality of cheap range available, winter needs of livestock, kind of soil, distance to market, availability and cost of labor needed, and equipment and improvements required.

Many sheep and cattle men located close to abundant and cheap pasture lands can wisely and profitably increase the number of their stock. The limit of livestock production for any one farmer depends primarily upon the carrying capacity of his pastures during dry years and the amount of winter feed provided. To insure against losses from a shortage of feed in years of drought, it is necessary always to provide a liberal carryover of surplus feeds from years of heavy production. This can be done by cutting more native hay than is needed for one season when grass is long and by supplementing this feed by growing a reasonable amount of fodder corn, sorghum or alfalfa, each year.

In sections where pasture is scarce, too expensive or not dependable, farmers are forced to seek more of their returns from the sale of crops. The procedure for farmers in such sections to follow is to study carefully the adaptability of the various crops to the particular localities. The best cultural methods for the different crops should be sought and the advantages and disadvantages of feeding or selling the crop should be examined. If a cash crop is wanted, particularly by farmers living a long distance from market, alfalfa seed and flax production seem to possess excellent possibilities. Several of the farmers visited were enthusiastic over their success with alfalfa seed production. During the last few years some of the men in this area have made more from this source than from any other. Both alfalfa seed and flax represent high values compared to their weight and can therefore better stand the cost of long hauls to market.

One of the principal difficulties encountered by men in this area who try to grow crops, is the scarcity and high price of labor. Farmers with little family labor to draw on, who contemplates readjustments in their enterprises, must carefully study the labor demands involved in such changes.

A few of the farmers reported excellent success with the production of feeder pigs. Farmers in Western South Dakota, who understand pork production, and who have land capable of producing corn, can well afford to investigate the opportunities for increasing their incomes from this enterprise. Feeder pig production does not require extensive farm equipment and buildings, which are very scarce in most parts of western South Dakota. Comfortable quarters, however, should be provided for brood sows during the winter and farrowing periods.

On farms where a small regular cash income is very much needed many ranchers and farmers have met this need by milking a few of their best milking beef cows. This is brought out in Table 15 (page 17) which gives the number of 10-gallon cans of cream shipped from Phillip, a typical town in this country. The extent to which farmers included in this study made use of this means of increasing their incomes is given in Table 16.

Table 15-Number of 10-Gallon Cans of Cream Shipped From  
Phillip, South Dakota, between August 1, 1920  
to Dec. 31, 1922.

	Year		
	1920	1921	1922
	10 gal. cans	10 gal. cans	10 gal. cans
January	No data	171	270
February	"	266	245
March	"	266	406
April	"	499	557
May	"	867	1145
June	"	1431	2057
July	"	1403	2014
August	809	1108	1453
September	634	901	1083
October	350	706	412
November	277	352	436
December	270	387	294

These Shipments not confined to interviewed farmers.

Table 16-Average Returns from Sale of Dairy Products  
on Farms Selling Cream.

	Kind of Farming				
	Cattle	Sheep	Livestock and Crop	Crop	All
Number of farms	16	8	32	8	64
Number of farmers selling cream	9	4	24	7	44
Number of cows milked: per farm	6.1	4.8	7.7	9.0	7.3
Receipts from dairy products per farm	\$207	\$156	\$303	\$446	\$293

The usually high calf prices during the past few years, compared to prices of other cattle, have started a tendency among some ranchers to sell their increase as calves. Cattlemen who are not burdened by the immediate demands of financial obligations and who have good prospects of abundant pasture should look upon such a practice with considerable caution. It is probable that sooner or later cattle prices will again assume their proper relationship with other commodities and that the demand for steers and good breeding stock will be such that those who have maintained or increased their herds will be duly rewarded.





